



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/646,818

08/25/2003

Masaru Inoue

69022(302753)

1815

21874

7590

04/30/2009

EDWARDS ANGELL PALMER & DODGE LLP

P.O. BOX 55874

BOSTON, MA 02205

EXAMINER

HEINRICH, SAMUEL M

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

04/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/646,818	Applicant(s) INOUE ET AL.	
	Examiner Samuel M. Heinrich	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/5/08, 1/13/09, and 4/20/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-9 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/20/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 3 and 5-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the replies filed on April 08, 2005 and January 13, 2009.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA), including JP2000339894A which is described in the Description of Related Art, in view of USPN 7,133,257 to Chang et al in view of

Art Unit: 3742

USPN 6,548,009 to Khlif et al in view of USPN 4,691,241 to Tomohisa et al in view of USPN 5,622,567 to Kojima et al.

AAPA describes (USPN 20040037011, [0008], Description of Related Art) well known laser irradiation, as disclosed in JP200033994A, of an outrigger perpendicular to a direction of curvature in order to bend the outrigger due to the thermal energy of the laser beam. AAPA does not describe irradiating around the outrigger head mounting in opposing coordinate directions, described as “the area I and the area III or the area II and the area IV”.

Chang et al describe (Front Page) adjusting the twist, crown and camber of a slider by applying twist scribes in diagonally opposite corner regions.

Khlif et al describes (column 7, lines 45-54) a “beam 120 can form a melt pattern with one or more twist control bands 126 and 127, which are located in opposing corners 128A and 128c, along diagonal 130.”

The instant claimed control of curvature by applying laser scribes in opposing areas of an outrigger plate would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because both Chang et al and Khlif et al describe opposing corner scribe methods which accurately and precisely provide twist control.

The instant claimed “laser beam is polarized in XY directions with a galvano scanner mirror and is condensed with a long focal length lens” would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art. Tomohisa et al describe (Summary, column 1, lines 12-19) a laser beam is

Art Unit: 3742

“brought to the galvano mirror to be polarized”. Kojima et al describe (column 31, first paragraph) the well known precisely controlled application of laser energy to a workpiece using a long focal length. Using old and well known beam irradiation techniques would have been obvious in order to provide fine control of the applied laser energy.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA), including JP2000339894A which is described in the Description of Related Art, in view of USPN 7,133,257 to Chang et al in view of USPN 6,548,009 to Khlif et al in view of USPN 6,984,802 to Kuroiwa et al in view of USPN 5,622,567 to Kojima et al.

AAPA describes (USPN 20040037011, [0008], Description of Related Art) well known laser irradiation, as disclosed in JP200033994A, of an outrigger perpendicular to a direction of curvature in order to bend the outrigger due to the thermal energy of the laser beam. AAPA does not describe irradiating around the outrigger head mounting in opposing coordinate directions, described as “the area I and the area III or the area II and the area IV”.

Chang et al describe (Front Page) adjusting the twist, crown and camber of a slider by applying twist scribes in diagonally opposite corner regions.

Khlif et al describes (column 7, lines 45-54) a “beam 120 can form a melt pattern with one or more twist control bands 126 and 127, which are located in opposing corners 128A and 128c, along diagonal 130.”

Art Unit: 3742

The instant claimed control of curvature by applying laser scribes in opposing areas of an outrigger plate would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because both Chang et al and Khlif et al describe opposing corner scribe methods which accurately and precisely provide twist control.

The instant claimed "laser beam is polarized in XY directions with a galvano scanner mirror and is condensed with a long focal length lens" would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because Kuroiwa et al describe (Front Page) well known galvano scanner components and Kojima et al describe (column 31, first paragraph) the well known precisely controlled application of laser energy to a workpiece using a long focal length. Using old and well known beam irradiation techniques would have been obvious in order to provide fine control of the applied laser energy.

Response to Arguments

Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3742

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/
Primary Examiner, Art Unit 3742